

STATE OF MISSOURI
DEPARTMENT OF NATURAL RESOURCES
MISSOURI CLEAN WATER COMMISSION



MISSOURI STATE OPERATING PERMIT

General Operating Permit

In compliance with the Missouri Clean Water Law, (Chapter 644 R.S. Mo. as amended, hereinafter, the Law), and the Federal Water Pollution Control Act (Public Law 92-500, 92nd Congress) as amended,

MO-G822000

is authorized to discharge from the facility described herein, in accordance with the effluent limitations and monitoring requirements as set forth herein:

FACILITY DESCRIPTION

No-Discharge Facility - Sic Code 2011-2099 & 5812

Land Application or subsurface absorption system for wastes from Light Commercial Food Products Industry Major Group 20 (SIC Codes 2011-2099) and restaurant grease traps (SIC Code 5812) onto agricultural land for use as fertilizer and soil amendment.

This permit authorizes only wastewater, including storm waters, discharges under the Missouri Clean Water Law and the National Pollutant Discharge Elimination System; it does not apply to other regulated areas. This permit may be appealed in accordance with Section 644.051.6 of the Law.

June 9, 2006

Effective Date

Doyle Childers, Director, Department of Natural Resources
Executive Secretary, Clean Water Commission

June 8, 2011

Expiration Date
MO 780-0041 (10-93)

Edward Galbraith, Director of Staff, Clean Water Commission

APPLICABILITY

1. This general permit authorizes the land application of process wastewater and sludges from light commercial Food Products Industry Major Group 20 (SIC Codes 2011-2099) and restaurant grease traps (SIC Code 5812). See the description of SIC Codes listed at the end of this permit. Wastes may be land applied onto grass land, crop land, or timber land at rates suitable for beneficial use as organic fertilizer and soil conditioner.
2. This general permit also authorizes department approved subsurface absorption systems utilizing septic tanks as primary treatment for commercial Food Products Industry Major Group 20 (SIC Codes 2011-2099).
3. Land application facilities with design flows greater than 10,000 gallons per day must obtain a site specific permit. Subsurface injection or absorption facilities with design flows greater than 1,000 gallons per day must obtain a site specific permit.
4. A separate general permit is required for each Department of Natural Resources region where waste materials will be land applied. Contact any department office for a regional boundary determination. If desired, the permittee may choose to obtain a separate permit for each land application site.
5. Any owner/operator authorized by a general permit may request to be excluded from the coverage of the general permit and apply for a site-specific permit (10 CSR 20-6.010(13)).
6. Land application or subsurface injection shall not occur within 1,000 feet of biocriteria reference streams, or streams or lakes listed as an outstanding national resource water* or their tributaries, 300 feet of a sinkhole, wetland, or losing stream*; 100 feet from a well or waters of the state, 150 feet from dwellings; and 50 feet from the property line or drainage ditch.

* Identified or described in 10 CSR 20, Chapter 7. These regulations are available at many libraries and may be purchased from MDNR by calling the Water Protection Program.
7. If at any time the Missouri Department of Natural Resources determines that the quality of waters of the state may be better protected by requiring the owner/operator of a permitted site to apply for a site specific permit, the department may require any person to obtain a site specific operating permit (10 CSR 20-6.010(13)).
8. The department may require the permittee to apply for and obtain a site specific or different general permit if, but not limited to:
 - a. The permittee is not in compliance with the conditions of this general permit;
 - b. The discharge no longer qualifies for this general permit due to changed volume, chemical characteristics, site conditions, and/or regulations;
 - c. Information becomes available that indicates water quality standards have been or may be violated; or
 - d. If the department determines that quality of waters of the state should be better protected.
9. The permittee will be notified in writing of the need to apply for a site specific permit or a different general permit. When a site specific permit or different general permit is issued to the authorized permittee, the applicability of this general permit to the permittee is automatically terminated upon the effective date of the site specific or different general permit, whichever the case may be.
10. For the purposes of this permit, land application shall mean any surface application of wastes or wastewater, including materials that are incorporated into the soil or 'knifed in'. Subsurface application shall mean systems with primary treatment prior wastewater entering stationary subsurface distribution lines in the soil. The distribution lines may be pressurized or non-pressurized.

EXEMPTIONS FROM STATE PERMIT REQUIREMENTS

1. No-discharge land application facilities that generate less than 1,000 gallons per year and that are in compliance with Missouri Water Quality Standards (10 CSR 20-7.031). This exemption applies only to the types of facilities described in this permit and only to those facilities applying wastewater to the surface.
2. One time or short-term land application events during clean up of spills or environmental emergencies with prior approval from the department.

LAND APPLICATION & SUBSURFACE INJECTION RATE CRITERIA

2. Land application rates shall not exceed any of the following limitations:

- (a) Sludge shall not exceed 10 dry tons/acre/year.
- (b) Wastewater shall not exceed 0.2 inch/hour, 0.5 in/day, 1.0 in/week, and 24 in/year.
- (c) Application rates shall not exceed the following:

<u>Parameter</u>	<u>Maximum Annual Loading **</u>
Total Kjeldahl Nitrogen (TKN)	150 lbs/acre/year
Oil & Grease	1000 lbs/acre/year
pH standard units	6.0 to 9.0 in applied wastes

Note: * mg/L multiplied by 0.00834 = pounds per 1000 gallons.

2. Subsurface absorption facilities shall not exceed any of the following limitations:

<u>Parameter</u>	<u>Maximum Annual Loading</u>
pH standard units	6.0 to 9.0 in injected wastes

LAND APPLICATION OPERATIONAL REQUIREMENTS

1. These operational requirements do not apply to subsurface absorption facilities.
2. Land application facilities shall be operated as no-discharge facilities in accordance with 10 CSR 20-6.015(1)(B)7. A no-discharge facility is a facility designed and operated:
 - (a) to hold or land apply without direct discharge to surface or subsurface waters of the state, all waste flows and associated storm water flows for the wettest one-in-ten year precipitation and the twenty-five year twenty-four hour rainfall;
 - (b) wastes are not land applied during frozen, snow covered, or saturated soil conditions.
3. A Land Application Management Plan shall be developed to address the Land Application Rate Criteria, Best Management Practices and other requirements contained in this permit. The permit contains conservative limits in order to reduce monitoring and reporting. If alternate limits are desired, a site-specific permit must be obtained.
4. Annual application rates shall conform to the Land Application Management Plan and shall not exceed the rates specified under the Land Application Rate Criteria section of this permit.
5. Land application rates shall not cause surface ponding of applied waste or runoff from the application sites during land application.
6. Plastic, paper, and other solid material exceeding 0.5 inch in diameter shall not be land applied.
7. Oil and grease that is separated through use of grease traps, oil & water separator, or other means shall be land applied by subsurface injection or incorporated by soil tillage within six (6) hours after surface application.
8. Wastes shall be land applied at least 30 days before crop harvesting or grazing by cattle.
9. Wastes shall not be applied on field slopes exceeding 20 percent.
10. Land application shall not occur during frozen, snow covered, or saturated soil conditions.
11. Sludges shall not be applied to public use areas, gardens, or vegetable crops, unless the waste has been treated by a process to further reduce pathogens such as composting or equivalent treatment processes. Wastewater shall not be applied to public use areas unless it conforms with the disinfection requirements of 10 CSR 20-8.020(15)(F)9.A.
12. Wastes shall be land applied using application equipment that can spread the material uniformly over the entire application site. Dumping in batches or piles or spreading of a pile using a blade, disc, or similar equipment is not acceptable.

LAND APPLICATION OPERATIONAL REQUIREMENTS (continued)

13. Provide adequate waste storage or alternate disposal method as needed to match the land application windows for crop planting, harvesting, and inclement weather conditions. Operate storage basins so there is no discharge to waters of the state.
 - (a) Recommended minimum storage for grass land sites ranges from 60 to 120 days as follows: 60 days south of Highway 60; 75 days between Highway 60 and Highway 50; 90 days between Highway 50 and Highway 36; and 120 days north of Highway 36.
 - (b) If storage is not provided, the wastes shall be hauled to a permitted wastewater treatment facility during inclement weather conditions when land application is not allowed.
14. Lagoon basins shall be operated so that maximum water elevation does not exceed one foot below the overflow point except due to the rainfall exceptions in this permit. The minimum operating water level shall be clearly marked and lagoons/storage basins shall be lowered to this minimum level prior to each winter. The recommended target date for achieving the minimum level is November 1.
15. Land application sites shall be well vegetated during the application periods or vegetation should be established as soon as practicable after waste incorporation within the normal crop planting and harvesting season.

OTHER REQUIREMENTS

1. Equipment for land application or subsurface injection shall be properly operated and maintained and shall be visually checked daily during land application.
2. Subsurface absorption systems shall not violate any requirements of Class V UIC Federal Regulations.
3. Subsurface absorption systems are allowed to operate when soil is not saturated or frozen at the depth of injection. Subsurface injection is allowed during snow covered conditions.
4. These requirements do not supersede nor remove liability for compliance with County, State, or Federal requirements and local ordinances, including but not limited to the requirements of 10 CSR 20-8.
5. All operators shall be provided training in proper land application procedures as outlined in this permit and in the Land Application Plan contained in the application. Proof of this training, i.e. material covered, date of training, attendees, etc., shall be made available to the department if requested.
6. Subsurface absorption facilities shall comply with the reporting requirements of 40 CFR 144.26. A copy of this report shall be provided to the US EPA and to the Department of Natural Resources Division of Geologic and Land Survey. All applicants must have a construction permit or an approval that the design meets good engineering designs & specifications.
7. Water Quality Standards
 - (a) Discharges to waters of the state shall not cause a violation of water quality standards rule under 10 CSR 20-7.031, including both specific and general criteria.
 - (b) General Criteria. The following general water quality criteria shall be applicable to all waters of the state at all times including mixing zones. No water contaminant, by itself or in combination with other substances, shall prevent the waters of the state from meeting the following conditions:
 - (1) Waters shall be free from substances in sufficient amounts to cause the formation of putrescent, unsightly or harmful bottom deposits or prevent full maintenance of beneficial uses;
 - (2) Waters shall be free from oil, scum and floating debris in sufficient amounts to be unsightly or prevent full maintenance of beneficial uses;
 - (3) Waters shall be free from substances in sufficient amounts to cause unsightly color or turbidity, offensive odor or prevent full maintenance of beneficial uses;
 - (4) Waters shall be free from substances or conditions in sufficient amounts to result in toxicity to human, animal or aquatic life;
 - (5) There shall be no significant human health hazard from incidental contact with the water;
 - (6) There shall be no acute toxicity to livestock or wildlife watering;
 - (7) Waters shall be free from physical, chemical or hydrologic changes that would impair the natural biological community;
 - (8) Waters shall be free from used tires, car bodies, appliances, demolition debris, used vehicles or equipment and solid waste as defined in Missouri's Solid Waste Law, section 260.200, RSMo, except as the use of such materials is specifically permitted pursuant to section 260.200-260.247.

MONITORING, RECORDS AND REPORTING REQUIREMENTS

1. A sample of wastes to be land applied or injected shall be collected each year and tested for the applicable parameters by SIC Code:

<u>Test Parameter</u>	<u>SIC Codes</u>
Total Kjeldahl Nitrogen (TKN)	20xx
Total Phosphorus as P	20xx
Total Sodium	20xx and 5812
Total Chloride as Cl	20xx and 5812
Total Suspended Solids	20xx and 5812
Oil & Grease	203x, 205x-207x, 209x and 5812
pH standard units	20xx and 5812

2. Maintain records on file at the facility for at least five years for the following:
- (a) rainfall received at storage basin/land application site;
 - (b) dates and volumes of liquids or sludges applied or injected;
 - (c) map of land application site(s);
 - (d) crops grown/harvested from land application site(s);
 - (e) monthly level of storage basin;
 - (f) dates of wastewater discharges from storage basin/land application site(s).
3. An annual report shall be submitted to the department by January 28 of each year for the previous calendar year period. The annual report shall include a monthly summary of the records required under this permit, including sampling.
4. All records and reports required under this permit shall be made available for inspection by the department during normal working hours and copies of such records and reports shall be provided upon request by the department.

LIST OF SIC CODES AND DESCRIPTIONSSIC Code Description

20xx	Major Group - Food and Kindred Products (2011-2099)
201x	Meat Products (2011-2015)
202x	Dairy Products (2021-2026)
203x	Canned, Frozen and Preserved Fruits, Vegetables, and Food Specialties (2032-2038)
204x	Grain Mill Products (2041-2048)
205x	Bakery Products (2051-2053)
206x	Sugar and Confectionery Products (2061-2068)
207x	Fats and Oils (2071-2079)
208x	Beverages (2082-2087)
209x	Miscellaneous Food Preparations and Kindred Products (2091-2099)
5812	Restaurants (grease trap pumpings only for this permit)

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS					PAGE NUMBER 6 of 6	
					PERMIT NUMBER MO-G822000	
The permittee is authorized to discharge from outfall(s) with serial number(s) as specified in the application for this permit. The final effluent limitations shall become effective upon issuance and remain in effect until expiration of the permit. Such discharges shall be controlled, limited and monitored by the permittee as specified below:						
OUTFALL NUMBER AND EFFLUENT PARAMETER(S)	UNITS	FINAL EFFLUENT LIMITATIONS			MONITORING REQUIREMENTS	
		DAILY MAXIMUM	WEEKLY AVERAGE	MONTHLY AVERAGE	MEASUREMENT FREQUENCY	SAMPLE TYPE
<u>Outfall #001</u> - Emergency discharge to surface water (Notes 1 & 2)						
Flow	MGD	*			once/day	24 hr. estimate
Biochemical Oxygen Demand ₅	mg/L		45		once/day	grab
Total Suspended Solids	mg/L		45		once/day	grab
Ammonia Nitrogen as N	mg/L	*			once/day	grab
Temperature	°F	*			once/day	grab
pH – Units	SU	**		**	once/day	grab
MONITORING REPORTS SHALL BE SUBMITTED <u>ANNUALLY</u> ; THE FIRST REPORT IS DUE <u>October 28, 2006</u> . THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.						
B. STANDARD CONDITIONS						
IN ADDITION TO SPECIFIED CONDITIONS STATED HEREIN, THIS PERMIT IS SUBJECT TO THE ATTACHED <u>Parts I & III</u> STANDARD CONDITIONS DATED <u>October 1, 1980 and August 15, 1994</u> , AND HEREBY INCORPORATED AS THOUGH FULLY SET FORTH HEREIN.						

MO 780-0010 (8/91)

* Monitoring requirement only

** pH is measured in pH units and is not to be averaged. The pH is to be maintained at or above 6.0 pH units.

Note 1 – Monitor only when discharge occurs. Discharges shall be reported to the department within 24 hours.

Note 2 – There shall be no discharge of process wastewater during dry weather conditions. Discharge is allowed only due to overflow through the emergency spillway of the storage lagoon or other uncovered storage structure. Emergency discharge is not allowed from any structure not open and exposed to rainfall.

PERMIT RENEWAL REQUIREMENTS

Unless this permit is terminated, the permittee shall submit an application for the renewal of this permit no later than six (6) months prior to the permit's expiration date.

TERMINATION OF PERMIT

This permit may be terminated when activities covered by the permit have ceased. If termination is sought, the permittee shall submit Form H, Termination of a General Permit, and a closure plan. Closure of the treatment facility shall be in accordance with a department approved closure plan unless this requirement is waived by the department.

PERMIT TRANSFER

This permit may be transferred to a new owner by submitting an "Application for Transfer of Operating Permit" signed by the seller and buyer of the facility, along with the appropriate modification fee. The new owner must also submit with the application an updated Operation & Maintenance Plan for review.

DUTY TO COMPLY

The permittee shall comply with all conditions of this general permit. Any noncompliance with this general permit constitutes a violation of Chapter 644, Missouri Clean Water Law, and 10 CSR 20-6.200. Noncompliance may result in enforcement action, termination of this authorization, or denial of the permittee's request for renewal.

PUBLIC NOTICE

Public Notice of the issuance of this permit to an applicant will not be required. Public Notice of reissuance is required if the facility was found to be in significant noncompliance during the time of the previous permit [10 CSR 20-6.020(1)(C)].